

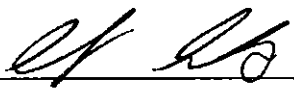
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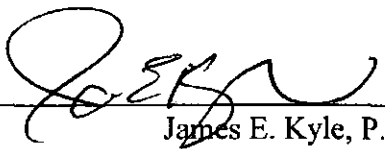
COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Piedmont Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Combined Heat & Power, LLC
Rockville, Virginia
Permit No. PRO-51201

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Combined Heat & Power, LLC, has applied for a renewal Title V Operating Permit for its Rockville, Virginia facility. The Department of Environmental Quality, Division of Air Quality (DEQ) has reviewed the application and has prepared a draft renewal Title V Operating Permit (Permit).

Engineer/Permit Contact:  Date: 4/22/09
Ashby R. Scott
(804) 698-4467

Air Permit Manager:  Date: 4/24/09
James E. Kyle, P.E.

Deputy Regional Director:  Date: 4/27/09
Kyle I. Winter, P.E.

Facility Information

Permittee

Combined Heat & Power, LLC
Rockville Plant
2250 Dabney Rd.
Richmond, VA 23230

Responsible Official

Mr. Charles J. Packard
President

Facility

Combined Heat & Power, LLC
Rockville Plant
2361 Lanier Road
Rockville, VA 23146

County Plant ID: 51-075-0030

Source Description

NAICS ID# 221119 - Other Electrical Power Generation

SIC Code: 4931-Electrical Power Generation

The facility is a 12 MW power generation facility composed of forty (40) 350kW generators. Combined Heat & Power, LLC is one of several facilities in the region, which are run by the operating company, Industrial Power Generating Company (INGENCO) Distributed Energy. The facility is located in an area in attainment for all pollutants at the time of public notice. The facility is a Title V major source for NO_x and CO emissions. The source's permitted emissions for all pollutants are below PSD applicability levels. The facility is currently permitted under the following permits: A Title V Operating Permit initially issued on April 22, 2004 and a minor NSR significant amendment permit issued on February 3, 2004 which superseded the minor NSR permit issued on May 30, 2000. This permit action pertains to the renewal of the current Title V Operating Permit. An application for permit renewal was received on February 12, 2008 by DEQ and was deemed administratively complete on February 14, 2008.

Compliance Status

A full compliance evaluation of this facility, including a site visit on January 10, 2008, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

Emission Unit and Control Device Identification

The emissions units at this facility consist of the following:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
E1-E16	S-1 S-2 S-3 S-4	350 kW Generators (16 in Group R-1)	Each engine is rated at 3.1 MMBtu/hour input, Detroit Diesel Model 6063-GK 60.	NA- air-to-fuel ratio control, turbo-charging, custom built after coolers and charge-air cooling systems in use on engines.	-	NO _x , CO, SO _x , VOCs, PM, PM 10, PCBs.	02/03/2004
E17-E40	S-5 S-6 S-7 S-8	350 kW Generators (24 in Group R-2)	Each engine is rated at 3.1 MMBtu/hour input, Detroit Diesel Model 6063-GK 60.	NA- air-to-fuel ratio control, turbo-charging, custom built after coolers and charge-air cooling systems in use on engines.	-	NO _x , CO, SO _x , VOCs, PM, PM 10, PCBs.	02/03/2004

Emissions Inventory

A summary of Combined Heat & Powers, LLC's most recent annual emissions

2007 PLANTWIDE EMISSIONS SUMMARY [TONS PER YEAR]	
CRITERIA POLLUTANTS	2007 ACTUAL EMISSIONS
Particulate Matter (PM10)	5.244
Particulate Matter (PM2.5)	5.244
Lead (Pb)	0.068
Nitrogen Oxides (NO _x)	120.611
Sulfur Dioxide (SO ₂)	5.296
Carbon Monoxide (CO)	13.11
VOC	0.96

2007 Facility Hazardous Air Pollutant Emissions	
POLLUTANT	2007 HAZARDOUS AIR POLLUTANTS [TONS PER YEAR]
PCLBs (Aroclors)	0.047

Emission Unit Applicable Requirements- [Emission Units E1-E40]

The engine configuration and controls were last set by the NSR permit dated February 3, 2004. NSPS Subpart IIII and MACT Subpart ZZZZ, Existing Source Rules do not apply to the facility. An explanation for the determination is provided in the "Inapplicable Requirements" section on pages 15-17.

Limitations

1. Nitrogen Dioxide emissions from the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall be controlled by custom-built dry after-coolers and good combustion practices. The forty Detroit Diesel Model 6063-GK 60 internal combustion engines shall be provided with adequate access for inspection.

(9 VAC 5-50-260 and Condition No. 3 of the minor NSR permit dated 2/3/2004)

2. Sulfur Dioxide emissions from the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall be controlled by the use of low-sulfur fuel.

(9 VAC 5-50-260 and Condition No. 4 of the minor NSR permit dated 2/3/2004)

3. Carbon Monoxide, particulate matter and volatile organic compound emissions from the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall be controlled by proper engine maintenance practices. The engines shall be repaired and maintained to prevent excess emissions of carbon monoxide, particulate matter and volatile organic compounds. Any change to the combustion control processes associated with the forty Detroit Diesel Model 6063-GK 60 internal combustion engines may require a permit to modify and operate.

(9 VAC 5-50-260 and Condition No. 5 of the minor NSR permit dated 2/3/2004)

4. The charge air temperature measured at the inlet to the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall not exceed an hourly average of 150 °F.

(9 VAC 5-50-260 and Condition No. 6 of the minor NSR permit dated 2/3/2004)

5. The R1 group (E1-16) and R2 group (E17-40) Detroit Diesel Model 6063-GK 60 internal combustion engine stacks shall be a minimum of 40 feet and 26 feet above ground level, respectively. The stacks shall not be lowered for any reason without prior written approval of the Director, Piedmont Region.

(9 VAC 5-80-1120 C, 9 VAC 5-80-1180 and Condition No. 9 of the minor NSR permit dated 2/3/2004)

6. The approved fuels for the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) are distillate fuel oil, No. 4 fuel oil and mineral oil dielectric fluid (MODEF). A change in the fuel may require a permit to modify and operate.

(9 VAC 5-80-1180 and Condition No. 10 of the minor NSR permit dated 2/3/2004)

7. The fuel shall meet the specifications below:
DISTILLATE OIL which meets the American Society for Testing and Materials (ASTM) [D396] specifications for number 2 fuel oil, RESIDUAL OIL which meets the ASTM [D396] specifications for number 4 fuel oil, and MODEF:

Sulfur content:

Maximum sulfur content per shipment: 0.5% by weight

Average annual sulfur content, calculated monthly as the sum of each consecutive 12-month period: 0.2% by weight

Heat content:

DISTILLATE OIL:137,000 BTU/gallon

RESIDUAL OIL:144,000 BTU/gallon

MODEF:145,000 BTU/gallon

(9 VAC 5-80-1180 and Condition No. 11 of the minor NSR permit dated 2/3/2004)

8. Contaminants contained in the MODEF burned in the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall not exceed the limits specified below:

PCB content : 49 ppm by weight

Lead content: 25 ppm by weight

Flash Point: 100 EF, minimum

(9 VAC 5-80-1180 and Condition No. 12 of the minor NSR permit dated 2/3/2004)

9. The Total Heat Input (HI_{TOTAL}) to the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall not exceed 208,696 MMBtu/yr, calculated monthly as the sum of each consecutive 12-month period.

(9 VAC 5-80-1180 and Condition No. 13 of the minor NSR permit dated 2/3/2004)

10. The Total Heat Input (HI_{TOTAL}) to the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall be calculated on a monthly basis using the following equation:

$$HI_{TOTAL} \text{ (MMBtu)} = \frac{(Gal_{MODEF} \times HV_{MODEF}) + (Gal_{No.2} \times HV_{No2}) + (Gal_{No.4} \times HV_{No.4})}{1,000,000 \text{ Btu/MMBtu}}$$

Where Gal_X is the monthly throughput in gallons for fuel type X and HV_X is the Heating Value for that fuel type found in the Permit Section III.A.7.

(9 VAC 5-80-1180 and Condition No. 14 of the minor NSR permit dated 2/3/2004)

11. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil or residual oil. Each fuel supplier certification shall include the following:

- a. The name of the fuel supplier;
- b. The date on which the oil was received;
- c. The volume of oil delivered in the shipment;
- d. A statement that the distillate oil complies with the ASTM specifications [D396-78] for number 2 fuel oil or number 4 fuel oil, respectively, and
- e. The sulfur content of the oil

(9 VAC 5-170-160 and Condition No. 15 of the minor NSR permit dated 2/3/2004)

12. The permittee shall analyze a composite sample of the MODEF monthly to verify the limits in Permit Sections III.A.7 and III.A.8. The permittee shall maintain records of all oil analyses and of all oil shipments purchased. These records shall be available for inspection by the DEQ. Such records shall be current for the most recent five years.

(9 VAC 5-170-160 and Condition No. 16 of the minor NSR permit dated 2/3/2004)

13. Emissions from the operation of the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall be calculated using the formulas below:

For PM/PM10, NOx, CO and VOC -

$$\text{Pollutant Emission (tons/yr)} = \frac{\text{HI}_{\text{TOTAL}} (\text{MMBtu/yr}) \times \text{Pollutant Emission Factor (lbs/MMBtu)}}{2000 \text{ lbs/ton}}$$

Where HI_{TOTAL} is calculated according to Permit Section III.A.14 and the Emission Factor is taken from Condition 14.

For SO₂ -

$$\text{SO}_2 \text{ Emissions (tons/yr)} = \frac{1.01 \text{ lbs/MMBtu} \times \% \text{ Sulfur in fuel} \times \text{HI}_{\text{TOTAL}}}{2000 \text{ lbs/ton}}$$

Where HI_{TOTAL} is calculated according to Permit Section III.A.10 and the % sulfur in the fuel is the average annual value as derived from fuel certification forms as required by Permit Section III.A.11 (for distillate and residual oil) or analyses as required by Permit Section III.A.12 (for MODEP).

(9 VAC 5-50-260, 9 VAC 5-50-180 and Condition No. 17 of the minor NSR permit dated 2/3/2004)

14. Emissions from the operation of each of the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall not exceed the limits specified below:

Particulate Matter	0.1	lb/MMBtu
PM-10	0.1	lb/MMBtu
Sulfur Dioxide	0.5	lb/MMBtu
Nitrogen Dioxide	2.3	lb/MMBtu
Carbon Monoxide	0.25	lb/MMBtu
Volatile Organic Compounds	0.1	lb/MMBtu

Compliance with the lb/MMBtu limits for PM, PM-10, NOx, CO and VOC shall be determined by stack testing. All other emission limits are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Permit Sections III.A.1, III.A.2, III.A.3, III.A.7, III.A.8, III.B.1, III.B.2.

(9 VAC 5-50-260 and 9 VAC 5-50-180 and Condition No. 18 of the minor NSR permit dated 2/3/2004)

Compliance Assurance Monitoring

Since the facility does not meet all of the three requirements to be subject to the Compliance Assurance Monitoring (CAM) rule in 40 CFR Part 64, a CAM Plan is not needed. Permit Section III.A.4 sets a maximum of 150°F for the charge air temperature to Engines 1-40 in the facility. The charge air temperature controls limit NO_x by reducing the combustion temperature and, thus reducing the formation of thermal NO_x. The temperature control is by definition a passive control, while the CAM rule only applies to active pollution controls.

Monitoring

The monitoring and recordkeeping requirements in Conditions 7 and 8 of the NSR permit have been modified to meet the following Part 70 requirements labeled Conditions 1 and 2. Condition 3 is specific to the Title V Permit:

1. The forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall be equipped with devices to continuously measure the charge air temperature at the air inlet to the engine. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the engines are operating. A change in the location of the temperature indicator may require a permit to modify and operate.

(9 VAC 5-80-1180, 9 VAC 5-50-20, 9 VAC 5-50-260 and Condition No. 7 of the minor NSR permit dated 2/3/2004)

2. The monitoring devices used to continuously measure the inlet charge air temperature of the engines shall be observed by the permittee with a frequency of not less than hourly. The permittee shall keep a log of the observations from the monitoring device.

(9 VAC 5-50-50 F and Condition No. 8 of the minor NSR permit dated 2/3/2004)

3. Once per month, the facility shall conduct an observation of the presence of visible emissions from the operating 40 internal combustion engines. If visible emissions are observed, the facility shall take timely corrective action such that the units resume operation with no visible emissions, or perform a visible emissions evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from any

of the 40 internal combustion engines does not exceed 10% opacity whenever the engines are operated in a single fuel mode, except during one six-minute period in any one hour in which visible emissions shall not exceed 20% opacity and visible emissions from the 40 dual-fuel diesel engines stacks (S1-S8) shall not exceed 20% opacity whenever the engines are operated in a dual fuel mode except during one six-minute period in any one hour in which visible emissions shall not exceed 30.0% opacity. The VEE shall be conducted for a minimum of six minutes. If any of the observation exceeds 10% opacity, the VEE shall be conducted for sixty minutes. If compliance is not demonstrated by the VEE, timely corrective action shall be taken such that the operating engines resumes operation that is in compliance with the opacity limit. The facility shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observation, single or dual fuel operations, whether or not there were visible emissions, any VEE recordings and necessary corrective actions. Upon request by the DEQ, the facility shall conduct additional visible emission evaluations from the 40 internal combustion engines to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Director, Piedmont Region.

(9 VAC 5-170-160, 9 VAC 5-50-30 G, 9 VAC 5-50-50 and 9 VAC 5-50-410)

Recordkeeping

The permit includes the requirement, condition number 25 of the NSR permit, for maintaining records of all monitoring and testing required by the permit. These records include the following:

- a. Monthly and annual fuel throughputs, in gallons.
- b. Monthly and annual heat input to the engines in MMBtu.
- c. Monthly and annual pollutant emissions records calculated monthly using the heating values in Permit Section III.A.7. Sulfur dioxide emissions shall be calculated using the emission factors in Permit Section III.A.14, or emission factors approved by the Piedmont Regional Office.
- d. Hourly inlet charge air temperature indicator readings from each operating engine.
- e. Training records for employees responsible for operating the Detroit Diesel Model 6063-GK 60 internal combustion engines.

- f. All fuel supplier certifications and fuel analyses records.
- g. Operating procedures, maintenance schedules, and service records for all Detroit Diesel Model 6063-GK60 internal combustion engines, as well as temperature gauges measuring charge air inlet temperatures.
- h. Records for scheduled and unscheduled maintenance for all process equipment and temperature monitoring devices, including annual certifications of accuracy for those devices.
- i. Results of all stack tests, visible emissions evaluations and performance evaluations.

(9 VAC 5-50-50 and Condition No. 25 of the minor NSR permit dated 2/3/2004)

Testing

1. An initial performance test shall be conducted for Nitrogen Dioxide and Carbon Monoxide from the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) within 60 days of the Piedmont Regional Office receiving notice of the combustion of #4 residual oil to determine compliance with the emission limits contained in Permit Sections III.A.14 and IV.A.1. The test shall be performed while operating using 100% residual oil. The test shall be performed at no less than 90% of the rated capacity of the electrical output, on a minimum of one set of four engines. The test shall be performed, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. The test shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the test are to be arranged with the Director, Piedmont Region. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Piedmont Region within 60 days after test completion and shall conform to the test report format enclosed with this permit.

(9 VAC 5-50-20, 9 VAC 5-50-30, 9 VAC 5-50-410, VAC 5-80-1200 and Condition No. 21 of the minor NSR permit dated 2/3/2004)

2. Upon request by the DEQ, the permittee shall conduct additional performance tests for Nitrogen Dioxide from the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) to demonstrate compliance with the emission limits contained in this permit. The details of the tests shall be arranged with the Director,

Piedmont Region.

(9 VAC 5-50-30 G and Condition No. 23 of the minor NSR permit dated 2/3/2004)

3. Concurrently with the initial performance tests, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests are to be arranged with the Director, Piedmont Region. The permittee shall submit a test protocol at least 30 days prior to testing. The evaluation shall be performed within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Should conditions prevent concurrent opacity observations, the Piedmont Regional Office shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. One copy of the test results shall be submitted to the Director, Piedmont Region within 60 days of start-up and shall conform to the test report format enclosed with this permit.

(9 VAC 5-50-30 G, 9 VAC 5-80-1200 and Condition No. 22 of the minor NSR permit dated 2/3/2004)

4. Upon request by the DEQ, the permittee shall conduct additional visible emission evaluations from the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Director, Piedmont Region.

(9 VAC 5-50-30 G and Condition No. 24 of the minor NSR permit dated 2/3/2004)

5. The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing stack or duct that is free from cyclonic flow. Test ports shall be provided when requested.

(9 VAC 5-50-30 F and Condition No. 26 of the minor NSR permit dated 2/3/2004)

6. The performance tests required in Condition 1, of this section, shall at a minimum be conducted once every five years on all eight stacks and before the operating permit renewal application for NOx and CO, starting from the completion date of the testing as required in Condition 1. Each testing cycle shall evaluate the performance of a

different set of four engines (stack) to ensure the accuracy of the equations in the section, Inapplicable Requirements, Condition 6. The test shall be performed at no less than 90% of the rated capacity of the electrical output on a minimum of one set of four engines. The tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Director, Piedmont Region. The facility shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Piedmont Region within 60 days after test completion and shall conform to the test report format enclosed with this permit.

(9 VAC 5-80-1200)]

7. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC/ NMOC	EPA Method 18 or 25A/25C
NOx	EPA Method 7E
SO2	EPA Method 6C
CO	EPA Method 10
PM/PM10	EPA Methods 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

Reporting

1. The permittee shall furnish notification to the Director, Piedmont Region of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:
 - a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;
 - b. The expected length of time that the air pollution control equipment will be out of service;
 - c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period
 - d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9 VAC 5-20-180 B and Condition No. 28 of the minor NSR permit dated 2/3/2004)

2. The permittee shall furnish notification to the Director, Piedmont Region, of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but not later than four daytime business hours of the malfunction. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within 14 days of the occurrence. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify Director, Piedmont Region, in writing.

(9 VAC 5-20-180 C and Condition No. 29 of the minor NSR permit dated 2/3/2004)

Streamlined Requirements

The following conditions have been streamlined out of the renewal Title V Permit for the facility as these conditions have been satisfied pursuant to the April 22, 2004 Title V Permit. The streamlined conditions are as follows:

"The permittee shall furnish written notification to the Director, Piedmont Region, of the actual date on which modification of the sixteen Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-16) commenced within 30 days after such date.

(9 VAC 5-50-50 and Condition No. 27 of the minor NSR permit dated 2/3/2004)"

"This permit to modify the sixteen Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-16) shall become invalid, unless an extension is granted by the DEQ, if:

- a. A program of continuous modification is not commenced before the latest of the following:*
 - (1) 18 months from the date of this permit;*
 - (2) Nine months from the date that the last permit or other authorization was issued from any other governmental agency;*
 - (3) Nine months from the date of the last resolution of any litigation concerning any such permits or authorization; or*
- b. A program of modification is discontinued for a period of 18 months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of a phased construction project.*

(9 VAC 5-80-1210 and Condition No. 30 of the minor NSR permit dated 2/3/2004)"

General Conditions

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.2-604 and §10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement No. 2-2003".

This general condition cite(s) the Article(s) that follow(s):

Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80.
Federal Operating Permits for Stationary Sources

This general condition cites the sections that follow:

9 VAC 5-80-80. Application
9 VAC 5-80-140. Permit Shield
9 VAC 5-80-150. Action on Permit Applications

Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

This general condition cites the sections that follow:

9 VAC 5-40-41. Emissions Monitoring Procedures for Existing Sources
9 VAC 5-40-50. Notification, Records and Reporting
9 VAC 5-50-50. Notification, Records and Reporting

This general condition contains a citation from the Code of Federal Regulations as follows:

40 CFR 60.13 (h). Monitoring Requirements

Permit Modification

This general condition cites the sections that follow:

9 VAC 5-80-50. Applicability, Federal Operating Permit For Stationary Sources

9 VAC 5-80-190. Changes to Permits.

9 VAC 5-80-260. Enforcement.

9 VAC 5-80-1100. Applicability, Permits for New and Modified Stationary Sources

9 VAC 5-80-1790. Applicability, Permits for Major Stationary Sources and Modifications
Located in Prevention of Significant Deterioration Areas

9 VAC 5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications
Locating in Nonattainment Areas

Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow:

9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction

9 VAC 5-80-110. Permit Content

State Only Applicable Requirements

The following Virginia Administrative Codes have specific requirements only enforceable by the State and have been identified as applicable by the applicant:

9 VAC 5-50-310, Odorous Emissions

Future Applicable Requirements

There are no future applicable requirements for the permit.

Inapplicable Requirements

The NSPS Subpart IIII and MACT Subpart ZZZZ, Existing Source Rules do not apply to the facility. An explanation for the determination is provided in the following:

Existing Source Rule 4-8 does not apply (9 VAC 5-40-880)

"E. The provisions of this article do not apply to stationary internal combustion engines."

Internal Combustion Engine ACT [EPA453R-93032]

"Engines are permitted below the NO_x lb/MMBtu level in the ACT and do not apply until area is designated Non-attainment for Ozone."

MACT Subpart ZZZZ does not apply until the permit HAP emissions are increased to major thresholds

"National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action promulgates national emission standards for hazardous air pollutants (NESHAP) for stationary reciprocating internal combustion engines (RICE) with a site rating of more than 500 brake horsepower (HP).

We have identified stationary RICE as major sources of hazardous air pollutants (HAP) emissions such as formaldehyde, acrolein, methanol, and acetaldehyde."

NSPS Subpart IIII does not apply until the diesel engines are modified in accordance with 40 CFR 60, NSPS Subpart IIII. The engine configuration and controls were last set by the minor NSR permit dated February 3, 2004.

"Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

What This Subpart Covers § 60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section.

For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:

(i) 2007 or later, for engines that are not fire pump engines,

(ii) The model year listed in table 3 to this subpart or later model year, for fire pump engines.

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005 where the stationary CI ICE are:

(i) Manufactured after April 1, 2006 and are not fire pump engines, or

(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006. "

"(3) Owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005."

Compliance Plan

There is no compliance plan for the permit.

Facility Wide Conditions

Limitations

1. Visible emissions from the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) stacks shall not exceed 10.0% opacity as determined by EPA Method 9 (reference 40 CFR Part 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

(9 VAC 5-50-80, 9 VAC 5-50-260 and Condition No. 20 of the minor NSR permit dated 2/3/2004)

2. Total emissions from the facility shall not exceed the limits specified below:

Particulate Matter	13.0	lbs/hr	11.0	tons/yr
PM-10	13.0	lbs/hr	11.0	tons/yr
Sulfur Dioxide	65.0	lbs/hr	22.0	tons/yr
Nitrogen Dioxide	295.0	lbs/hr	240.0	tons/yr
Carbon Monoxide	32.0	lbs/hr	27.0	tons/yr
Volatile Organic Compounds	13.0	lbs/hr	11.0	tons/yr
Polychlorinated biphenyls (Aroclors)	0.4	lbs/hr	0.3	tons/yr
Lead	0.2	lbs/hr	0.2	tons/yr

Compliance with the lb/hr limits for PM, PM10, NOx, CO and VOC may be determined by additional stack testing or other appropriate means upon request of the Department. All other emission limits are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of the emission limits. Compliance with these emission limits may be determined as stated in Sections III.A.1, III.A.2, III.A.3, III.A.5, III.A.6, III.A.7, III.A.9, III.A.10, III.B.1 and III.B.2.

(9 VAC 5-50-260 and 9 VAC 5-50-180 and Condition No. 19 of the minor NSR permit dated 2/3/2004)

Insignificant Emission Units

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
T41	Fuel oil storage tank	5-80-720 B.	VOC	15,000 Gallon
T42	Fuel oil storage tank	5-80-720 B.	VOC	15,000 Gallon
T43	Fuel oil storage tank	5-80-720 B.	VOC	10,000 Gallon
T44	Fuel oil storage tank	5-80-720 B.	VOC	13,500 Gallon
T45	Fuel oil storage tank	5-80-720 B.	VOC	13,500 Gallon
T46	Fuel oil storage tank	5-80-720 B.	VOC	20,000 Gallon
T47	Fuel oil storage tank	5-80-720 B.	VOC	20,000 Gallon
T48	Fuel oil storage tank	5-80-720 B.	VOC	20,700 Gallon

T49	Fuel oil storage tank	5-80-720 B.	VOC	20,700 Gallon
T50	Fuel oil storage tank	5-80-720 B.	VOC	20,700 Gallon
T51	Fuel oil storage tank	5-80-720 B.	VOC	20,700 Gallon
T52	Fuel oil storage tank	5-80-720 B.	VOC	20,700 Gallon
T53	Fuel oil storage tank	5-80-720 B.	VOC	20,700 Gallon
T54	Fuel oil storage tank	5-80-720 B.	VOC	31,000 Gallon
T55	Fuel oil storage tank	5-80-720 B.	VOC	31,000 Gallon
T56	Fuel oil storage tank	5-80-720 B.	VOC	31,000 Gallon

The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application

9 VAC 5-80-720 B - Insignificant due to emission levels

9 VAC 5-80-720 C - Insignificant due to size or production rate

Confidential Information

The applicant did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

Public Participation

The public notice will appear in the *Goochland Gazette* on March 5, 2009.

Beginning Date: March 5, 2009

Ending Date: April 5, 2009

No written comments were received during the Public Comment period or from US EPA for the concurrent 45 day comment period.